

What is claimed is:

1. A removable surface pack-off device, comprising:
  - a housing adapted to be mounted between the ends of an inner casing and an outer casing at or near the surface of a well;
  - at least one fluid passage disposed within the housing, which is adapted to pass fluid from a location outside of the well into an annulus formed between the inner and outer casings;
  - a first pressure-activated seal disposed between the inner casing and the housing; and
  - a second pressure-activated seal disposed between the outer casing and the housing.
2. The removable surface pack-off device according to claim 1, wherein the first and second pressure-activated seals are cup-type seals.
3. The removable surface pack-off device according to claim 1, wherein the first and second pressure-activated seals are formed of an elastomeric disk having a tapered end, which engages a surface of the respective casing in an interference fit when under pressure.
4. The removable surface pack-off device according to claim 1, further comprising a pair of retaining wings mounted to an outer surface of the housing.

5. The removable surface pack-off device according to claim 4, further comprising a clamp defined by a pair of flanges, which is adapted to be secured to an outer surface of the outer casing.

6. The removable surface pack-off device according to claim 5, wherein the clamp is formed in two halves, which are secured to one another around the outer surface of the outer casing by a pair of bolts.

7. The removable surface pack-off device according to claim 5, further comprising a pair of retention bolts, which are mounted to the pair of retaining wings at one end and the pair of flanges at the other.

8. The removable surface pack-off device according to claim 1, wherein a plurality of holes are drilled into the outer casing, which are adapted to receive a corresponding plurality of bolts, which secure the housing to the outer casing.

9. The removable surface pack-off device according to claim 1, wherein the first pressure activated seal is disposed between an outer surface of the inner casing and an inner surface of the housing.

10. The removable surface pack-off device according to claim 1, wherein the second pressure activated seal is disposed between an outer surface of the outer casing and an inner surface of the housing.

11. The removable surface pack-off device according to claim 1, wherein the second pressure activated seal is disposed between an inner surface of the outer casing and an outer surface of the housing.

12. The removable surface pack-off device according to claim 1, wherein the first pressure activated seal is secured in place by a retaining nut mounted to the housing and the second pressure activated seal is secured in place by a retaining nut mounted to the housing.

13. The removable surface pack-off device according to claim 1, further comprising an inlet connector, which is attached to the housing and is adapted to couple to a fluid supply source.

14. The removable surface pack-off device according to claim 1, further comprising a protective sleeve disposed on the outer surface of the inner casing opposite the at least one fluid passage.

15. The removable surface pack-off device according to claim 1, further comprising an eye hook mounted to a top surface of the housing, which enables the surface pack-off device to be lifted onto and off of the casings.

16. A removable surface pack-off device, comprising:

- a housing adapted to be mounted between the ends of an inner casing and an outer casing at or near the surface of a well;
- at least one fluid passage disposed within the housing, which is adapted to pass fluid from a location outside of the well into an annulus formed between the inner and outer casings;
- means for sealing the housing to an inner casing and an outer casing; and
- means for removably attaching the housing to the inner and outer casings.

17. The removable surface pack-off device according to claim 16, wherein the sealing means comprises a first pressure-activated seal disposed between the inner casing and the housing and a second pressure-activated seal disposed between the outer casing and the housing.

18. The removable surface pack-off device according to claim 17, wherein the first and second pressure-activated seals are cup-type seals.

19. The removable surface pack-off device according to claim 17, wherein the first and second pressure-activated seals are formed of an elastomeric disk having a tapered end, which engages a surface of the respective casing in an interference fit when under pressure.

20. The removable surface pack-off device according to claim 17, wherein the first pressure activated seal is disposed between an outer surface of the inner casing and an inner surface of the housing.

21. The removable surface pack-off device according to claim 17, wherein the second pressure activated seal is disposed between an outer surface of the outer casing and an inner surface of the housing.

22. The removable surface pack-off device according to claim 17, wherein the second pressure activated seal is disposed between an inner surface of the outer casing and an outer surface of the housing.

23. The removable surface pack-off device according to claim 17, wherein the first pressure activated seal is secured in place by a retaining nut mounted to the housing and the second pressure activated seal is secured in place by a retaining nut mounted to the housing.

24. The removable surface pack-off device according to claim 16, wherein the removable attachment means comprises a pair of retaining wings mounted to an outer surface of the housing.

25. The removable surface pack-off device according to claim 24, wherein the removable attachment means further comprises a clamp defined by a pair of flanges, which is adapted to be secured to an outer surface of the outer casing.

26. The removable surface pack-off device according to claim 25, wherein the clamp is formed in two halves, which are secured to one another around the outer surface of the outer casing by a pair of bolts.

27. The removable surface pack-off device according to claim 25, further comprising a pair of retention bolts, which are mounted to the pair of retaining wings at one end and the pair of flanges at the other.

28. The removable surface pack-off device according to claim 16, wherein the removable attachment means comprises a plurality of holes are drilled into the outer casing, which are adapted to receive a corresponding plurality of bolts, which secure the housing to the outer casing.

29. The removable surface pack-off device according to claim 28, wherein the removable attachment means further comprises the corresponding plurality of mounting bolts.

30. The removable surface pack-off device according to claim 16, further comprising an inlet connector, which is attached to the housing and is adapted to couple to a fluid supply source.

31. The removable surface pack-off device according to claim 16, further comprising a protective sleeve disposed on the outer surface of the inner casing opposite the at least one fluid passage.

32. The removable surface pack-off device according to claim 16, further comprising an eye hook mounted to a top surface of the housing, which enables the surface pack-off device to be lifted onto and off of the casings.

33. A removable surface pack-off device, comprising:

a housing adapted to be mounted between the ends of an inner casing and an outer casing at or near the surface of a well;

at least one fluid passage disposed within the housing, which is adapted to pass fluid from a location outside of the well into an annulus formed between the inner and outer casings;

a first pressure-activated seal disposed between the inner casing and the housing;

a second pressure-activated seal disposed between the outer casing and the housing; and

an attachment assembly, which comprises a pair of retaining wings mounted to an outer surface of the housing, a clamp defined by a pair of flanges, which is adapted to be secured to an outer surface of the outer casing, and a pair of retention bolts, which are mounted to the pair of retaining wings at one end and the pair of flanges at the other.

34. The removable surface pack-off device according to claim 33, further comprising an inlet connector, which is attached to the housing and is adapted to couple to a fluid supply source.

35. The removable surface pack-off device according to claim 33, further comprising a protective sleeve disposed on the outer surface of the inner casing opposite the at least one fluid passage, which shields the inner casing from erosion



caused by high pressure fluid being injected into the annulus between the inner and outer casings.

36. The removable surface pack-off device according to claim 33, further comprising an eye hook mounted to a top surface of the housing, which enables the surface pack-off device to be lifted onto and off of the casings.